

Notice of Allowability

Application No.

09/879,197

Examiner

Fred Ferris

Applicant(s)

KOMODA ET AL.

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12 June 2006.
2. ☒ The allowed claim(s) is/are 1-3,5 and 6.
3. ☒ The drawings filed on 13 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Fred Ferris
FRED FERRIS
PRIMARY EXAMINER
2006

DETAILED ACTION

1. *Claims 1-3, 5, and 6 are currently pending in this application and have been presented for examination based on applicant's amendment filed 12 June 2006. Claims 1-3, 5, and 6 have now been allowed over the prior art of record.*

Response to Arguments

2. *Applicant's arguments filed 12 June 2006 have been fully considered and are persuasive.*

Regarding applicant's response the 103(a) rejections: The examiner previously withdrew the 103(a) rejection in view of applicant's amendment to the claims and arguments submitted 15 December 2005.

Regarding applicant's response the 101 rejections: The examiner now withdraws the 101 rejection in view of applicant's amendment to the claims filed 12 June 2006.

Allowable Subject Matter

3. *Claims 1-3, 5, and 6 are allowed.*

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches certain elements of the claimed invention relating to a delay library specifying a model of I_{ds} - V_{ds} for a given gate potential with functional slew rate information specifying a fixed delay and modeling a MOS transistor as a fixed resistive element and power source that varies as time as noted in prior office actions. However, the prior art of record does not explicitly disclose the sequence of method

steps which further include modeling the MOS transistor by determining an operating current characteristic of the MOS transistor modeled and further segmenting the operating current characteristic based upon the delay library into a first region in which a current increases as a gate potential varies, a second region corresponding to a saturation region of the MOS transistor in which region the current gradually decreases as the gate potential remains constant, and a third region corresponding to a linearity region of the MOS transistor in which region the current decreases as the gate potential remains constant and subsequently estimating the delay time of the MOS transistor and output, as now recited in independent claim 1. (See: specification page 15, line 15 to page 18, line 25, for example) Dependent claims 2, 3, 5, and 6 and deemed allowable as depending directly or indirectly from independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the*

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examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached at 571-272-. The Official Fax Number is: (703) 872-9306

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June 28, 2006



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